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THE EUROPEAN DEFENCE COOPERATION: COLLECTIVE ACTION, NATIONAL PURPOSES AND CONTRIBUTION PROCESS

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Introduction

Introduced as one of the three pillars of the European Union by the Treaty of Maastricht, the Common Foreign and Security Policy aims to improve the member States cooperation concerning defence and foreign affairs issues. The ambition of establishing a military alliance in Europe is nevertheless not new, some attempts having been made through ad hoc organizations, but the advancements recently accomplished under the impetus given by the EU are quite significant. Thus, the objectives written down in the Treaty have quickly resulted in concrete common military and civilian interventions through the European Security and Defence Policy, which is the "practical tool" of the CFSP.

However, the European defence cooperation is not going without difficulties, since it impinges on the member States' sovereignty concerning foreign policy issues, which are quite sensible matters. Consequently, even if the goodwill of member countries was initially prevailing, in practice their participation in the common military operations is fluctuating. All EU members, indeed, do not manifest the same interest in the cooperation and the ESDP relies until now principally on the involvement of a few willingly countries. The mechanism of provision, based upon voluntary contributions, has probably also something to do with this moderate achievement, since the most part of the interventions' costs are financed by the participants countries.

The analysis of the European defence cooperation proposed here attempts to explain how the EU member States can cooperate in order to provide a viable and credible common force. Thus, the success and the limits of the mechanism based upon voluntary provision is assessed through an evaluation of the degree of fairness concerning the provisions' burden-sharing. Are also analyzed here the divergences between the European countries about defence preferences, and their implications for the military cooperation. However, the civilian operations are not studied here, because of their modest scope comparing to military interventions, and since their costs are financed by the ESDP budget, which does not really allow any freedom of action for the member States.

The method used for these analyses is at first based upon a theoretical approach, by applying the theory of collective action for the provision of public goods to the European defence cooperation. These literature indeed makes light on the matters that the alliance has to deal with, such as the underprovision resulting of voluntary contributions or the

determinants which influence the member States' decision to participate or not to the common operations. An empirical analysis then forms the second part of the study, through an observation of the national contributions to the common operations, and an estimation of member States' defence preferences concerning defence issues. Finally, a description of different scenarios for the future of the alliance provides some elements for an improved cooperation.

Résumé: La Politique Européenne de Sécurité et de Défense, dans sa forme actuelle, reste d'une portée limitée puisque portant presque exclusivement sur des opérations de maintien de la paix d'ampleur encore assez modeste. De plus, dans le cas de fournitures sur la base de participations volontaires d'un bien public dont les bénéfices répondent, du moins partiellement, au critère de non-excluabilité, la théorie des biens publics indique que les pays participants auront tendance à adopter des comportements stratégiques afin de bénéficier des contributions des autres Etats membres. Un tel système se révèle donc particulièrement peu incitatif, entraînant ainsi une sous-provision du bien public. L'observation empirique des contributions des pays participants aux opérations lancées dans le cadre de la PESD permet de confirmer en partie les hypothèses théoriques. Par ailleurs, une analyse des préférences nationales en matière de défense permet d'expliquer les difficultés de la coopération par l'hétérogénéité des participants, aussi bien en termes de dépenses de défense que de structure favorite pour l'intervention.

Summary: The European Security and Defence Policy, in its current form, still has a limited scope since it concerns almost exclusively peacekeeping operations with quite modest ambitions. Moreover, in the case of provision based upon voluntary involvements of a public good of which benefits fit, at least partially, with the criterion of non-excludability, the public good theory indicates that participant countries are inclined to adopt strategical behaviors in order to benefit from other member States' contributions. Such a scheme appears therefore particularly disincentive, leading thus to an under-provision of the public good. The empirical observation of participants countries' contributions to the operations launched in the ESDP framework confirms partly the theoretical hypothesis. In addition, an analysis of national preferences concerning defence issues explains the difficulties in the cooperation by its members' heterogeneity, both in terms of military expenditures and in terms of favorite framework for intervention.

Part I. The European defense policy: from the EDC to the ESDP

The idea of a mutual defence between european countries dates back to the post-Second World War era, in the Cold War context. However, a half-century later, this field is obviously not the most successful european cooperation, to say the least. Until the end of the twentieth century, the NATO provided to Western Europe the necessary multinational alliance in the West-East rivalry framework, thus a EU's own defence cooperation did not appear to be essential. The situation changed during the 1990s and the Yugoslav wars highlighted the EU incapacity to prevent and manage a crisis by itself. The development of a common defence then sped up until the creation of an European force capacity and the recent peacekeeping operations lead by the EU.

1.1. A first attempt: the European Defence Community

The EDC was a first attempt to build a mutual defence in Western Europe, initiated by France and its President of the Council, René Pleven, in 1950, and was originally to include France, Belgium, Netherlands, Luxembourg, West Germany and Italy, with the noticeable non-attendance of United Kingdom. The aim was for participant countries, and mainly France, to avoid the rearmament of West Germany and its accession to NATO, by building a defence force able to protect them from the Eastern Bloc and thus substitute for a German independent army. This ambitious project planned common institution and budget, but nevertheless also that participant countries kept the control of their own army, except of course West Germany.

The treaty of Paris which established the EDC was signed on 27 May 1952 by all participant governments. However, the EDC never went into effect, because of political discords in France. Indeed, the powerful French Communist Party was opposed to an anti-Soviet Bloc project, and Charles de Gaulle's criticisms about an EDC under NATO's supervision brought the French National Assembly to not ratify the treaty in 1954. This rejection by its main initiator led to the EDC's death and significantly slowed down the military European cooperation.

1.2. The Western European Union

The EDC's failure led Western Europe countries to put in place a less ambitious project, the WEU, by the Paris Agreements in 1954. This Union is based on the Treaty of Brussels, signed in 1948 by United Kingdom, France, Netherlands, Belgium and Luxembourg. Italy and West Germany were included in 1954 to form the WEU. Although it is mainly a defence cooperation, economic, social and cultural objectives are also defined by the Treaty of Brussels and are therefore incorporated into WEU's missions.

However, in fact, WEU did not take a really significant role, the NATO being in charge of Western Europe's defence against the Eastern Bloc. Furthermore, its activity decreased after United Kingdom accession to the EEC in 1973, when the WEU gave up its economic, social and cultural missions to concentrate on its defence objectives. Nowadays, since the European Security and Defence Policy is the frame of military cooperation, its functions are gradually transfered to EU, and the question of its future maintaining in place is discussed. However, the WEU has currently remaining missions, as providing a mutual assistance between member states in case of aggression of one of them, and offers the EU its expertise through annual reports.

The WEU's participating countries are split into four categories, amongst which some are obsolete nowadays:

- 10 member countries, members of both NATO and EU: Belgium, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain, United Kingdom.
- 6 associate member countries, members of NATO but not of EU1: Czech Republic, Hungary, Iceland, Norway, Poland, Turkey.
- 5 observer countries, members of EU but not of NATO: Austria, Denmark, Finland, Ireland, Sweden
- 7 associate partner countries, non-members of both NATO and EU¹: Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, Slovenia.

¹ Some of these countries are currently members of EU but were not when the classification was established.

Despite its progressive extinction in favor of the ESDP from the 1990s, the WEU had recently developed some concrete operation, built up on the basis of multilateral cooperation. Thus, in 1995, the Council of Ministers of the WEU approved the creation by France, Italy, Portugal and Spain of the European Operational Rapid Force (Eurofor) and its naval counterpart, the European Maritime Force (Euromarfor). Eurofor took part in two operation, in Albania (2001) in close links with NATO, and in support of the EU's operation Concordia (Republic of Macedonia, 2003). Because of the transfer of functions from the WEU to the EU, the Eurofor is gradually becoming reattached to the ESDP.

1.3. The EU's defence policy emergence

At the beginning of the 1990s, once the Cold War was over, EU member countries had sought to accelerate their own military cooperation, with the aim to be able to act independently from the NATO on the international stage. Its incapacity to weight in the Yugoslav conflict in 1991 led the European governments to define the Common Foreign and Security Policy, one of the three pillars established by the Treaty o European Union. At the same time, WEU members met during the Petersburg tasks, of which objectives will be incorporated later into the European Security and Defence Policy.

WEU Council of Ministers defined during the Petersberg tasks, in June 1992, a list of main objectives for the security cooperation between member countries. This meeting led them to target some operations as priorities in their field of action. The Petersberg declaration specifies that " [...] military units of WEU member States, acting under the authority of WEU, could be employed for:

- humanitarian and rescue tasks;
- peacekeeping tasks;
- tasks of combat forces in crisis management, including peacemaking."2

The EU has then adopted these objectives and made it its own in the Treaty of the European Union.

² Petersberg declaration, 19 June 1992

For its part, in parallel with WEU talks, EEC member States were working on the Treaty of Maastricht, in which one of the three pillars of the EU concerns the Common Foreign and Security Policy. According to the Treaty of Maastricht, the cooperation is then oriented on the safeguard of the common values, interest and independence of the Union, the strengthening of the security of the member States, the preservation of peace and international security, the development of the democracy and the respect for human rights and fundamentals freedom³.

In Fact, the CFSP does not really seek at creating an pan-European army able to preserve member States from an external aggression - a response to an offensive against an EU country remains rather on NATO's attributions - but aims to implement common positions and joint actions, or at least a convergence between national foreign policies. Concerning actions outside of EU territory, the Treaty lays the foundations for common peacekeeping operation and crisis prevention missions. EU member States aspire thus to develop their capacity to manage conflicts independently from NATO. However, future operations lead by EU should of course be coordinated in close partnership with NATO, and competition between both organizations may be avoided.

Besides the definition of the CFSP's spheres of action, a clarification in the role of the different EU's structures have been done. Thus the heads of States or governments, through the European Council, define the guidelines whereas the decision-making process depends upon the Council of the European Union. The European Commission has a lower weight in the decision process since it can simply give suggestions, but is in charge of the budget. The European Parliament, for its part, has a mere consultative role. Additionally to these pre-existent bodies, the Treaty of Amsterdam created in 1997 *ad hoc* structures, amongst which the High Representative for the Common Foreign and Security Policy⁴. Its role is to coordinate and personify the CFSP and can be assimilated to an EU foreign policy chief. Later, in 2004, another main organ of the CFSP has been created with the European Defence Agency, in order to support member States in improving European defence capabilities.

³ Treaty of Maastricht, article J.1

⁴ Position held since almost its creation by Javier Solana, also Secretary-General of the WEU, and former Secretary-General of NATO

1.4. The materialization of the Maastricht ambition through the European Security and Defence Policy

After having stated the scope of the common defence and its priorities, EU States ensured that these objectives became a reality through the creation, during the Cologne European Council in June 1999, of the European Security and Defence Policy. The ESDP is somehow the instrument of the CFSP, since it gives a concrete dimension to the Treaty of Maastricht's objectives.

A decisive progress have been done during the Franco-British Summit in Saint-Malo, in December 1998. Indeed, the United Kingdom was traditionally reluctant regarding an European defence cooperation, having rather a preference for a transatlantic alliance and the NATO primacy in defence issues, whereas France have been for a long time suspicious towards NATO. Moreover, because the United Kingdom and France are the two countries with the most powerful defence capabilities, the success of the ESDP depends heavily on an agreement between them. Thus, according to Jolyon Howorth, "without intense Franco-British cooperation and even integration, there is no possibility of developing either a credible CFSP, or a viable ESDP"5. However, despite these diverging positions, former President of France Jacques Chirac and former Prime Minister of the United Kingdom Tony Blair found an agreement during the Saint-Malo Summit concerning that "the Union must have the capacity for autonomous action [..] in order to respond to international crisis"6. In addition, the hierarchy between the NATO and the ESDP was clearly defined, the EU operation not having to compete with the Atlantic Alliance, which remains "the foundation of the collective defence of its members"6.

The Franco-British convergence made the EU move forward: indeed, taking the Joint Declaration of the Saint-Malo Summit into account, the Cologne European Council, in June 1999, officially launched the ESDP. At the same time, EU's States governments decided to incorporate the WEU Petersberg tasks into their common foreign policy, and scheduled the progressive transfer of WEU's attributions into the ESDP.

⁵ "Britain, France and the European Union defence initiative", Jolyon Howorth, 2000

⁶ Franco-British Summit, Joint Declaration on European Defence, Saint-Malo, 4 December 1998

1.5. Towards an effective defence capacity for the ESDP

The process then quickly moved on when, during the December 1999 Helsinki European Council, EU member States gave a concrete response to the Saint-Malo declaration's objective of "capacity for autonomous action". Thus, they defined the Helsinki Headline Goal 2003, with the aim of creating a force of about 60,000 troops before the end of 2003. This rapid reaction force, deployable within 60 days, was to enable the EU to carry out the Petersberg objectives, *i.e.* peacekeeping operations and crisis management outside of the EU. Other capability goals in the field of command and control, intelligence, logistic and transports have been defined too in order to make the force self-supporting.

The Headline Goal objectives were synthesized into the Helsinki Headline Catalogue, on which national governments was to propose their own contribution to the force, on the basis of voluntary commitment. These contributions have been published one year later, during the Brussels Capabilities Commitments Conference, in November 2000 (see table 1). Candidate countries and others voluntaries had also offer their contribution to future EU military operation, which raised the potential capacity between 83,000 and almost 100,000 troops. The future European force should also count approximately 400 military aircrafts and 100 vessels. The objective is therefore satisfied, at least on quantitative terms, with troops sufficient to fulfil the Helsinki requirements. However, in qualitative terms, some weaknesses have been identified, especially about strategic intelligence and transport, which prevent the European force to be totally independent of NATO.

A first and brief analysis of the level and the distribution of the national contributions leads to some observations. First of all, the weight of the major European countries in the whole provision is quite important. The four main contributors - Germany, United Kingdom, France and Italy - supply about the half of the total troops. Their contributions in the naval and air forces, as well as in strategic and intelligence capabilities are also significant compared with other countries' involvement. Secondly, the commitment of non-EU countries, future member States or simply voluntaries (amongst which the notable Turkish participation), is comparatively quite low but nevertheless reveals the goodwill of all concerned countries, or at least an attempt to show their implication into EU affairs.

EU countries	Troops	EU candidates or others countries	Troops
Germany	13,500	Turkey	5,000
United Kingdom	12,500	Lithuania	750 - 1,500
France	12,000	Romania	1,300
Italy	12,000 - 19,800	Bulgaria	960
Spain	6,000	Norway	± 600
Netherlands	5,000	Czech Republic	550
Greece	3,500 - 4,000	Poland	± 500
Austria	2,000 - 3,500	Estonia	± 450
Belgium	1,000 - 3,000	Slovakia	421
Finland	1,500 - 2,000	Hungary	250
Sweden	1,500	Cyprus	176
Ireland	1,000	Latvia	± 85
Portugal	1,000	Slovenia	± 85
Luxembourg	100	Iceland	25 - 50
Denmark	-	Malta	35

Table 1. Declared contributions to the Helsinki Headline Goal at the Capabilities Commitments Conference, November 2000 (sources: Berlin Information-center for Transatlantic Security, Western European Union)

Note: Denmark has an opt-out clause concerning the military part of the ESDP, according to the Treaty of Amsterdam, and choose to not declare any contribution.

Finally, these contributions, for a large part of them, appears to be pretty low considering the potential the participating countries dispose of. This limited ambition can express, from the contributors, a willingness to preserve their capacity to develop operations individually or within another collective alliance (NATO, UN), or a willingness from most of them to let the main European countries run the alliance.

Despite the weaknesses mentioned above, and that the national commitments are assumed to be available on the late 2003, the Laeken European Council, held on 14-15 December 2001, declared that "the EU is now able to conduct some crisis-management operations" and "will be in a position to take on progressively more demanding operations, as the assets and capabilities at its disposal continue to develop". This declaration of operationality enable from then on member States to launch operations in the ESDP framework. At the same time, European political leaders agreed on the needs to fill the gaps in the fields of strategical and command issues, intelligence, and lack of cooperation which leads to unnecessarily duplicated efforts. To that purpose, they defined the European Capabilities Action Plan which aims to continue to improve military capabilities, and to rationalize and optimize the individual efforts so as to make the common force more efficient. With the same objectives, the Headline Goal 2010 has later replaced the Helsinki Headline Goal once this one has been completed.

In order to coordinate the national efforts and to give a global direction to the ongoing common defence, the European defence Agency have been created in 2004. Under the High Representative for the CFSP's supervision, the EDA has four main functions about the following issues:

- defence capabilities development;
- armaments cooperation promotion;
- research and technology promotion;
- creation of an competitive European defence market and support to industrial base.

Thereby, its role is not only concerning purely defence issues, but also target economics matters as increasing transparency and competition on the European defence market, or stimulate the research and technology sector. For that, the EDA has its own budget (€32 million in 2008), financed by all EU member States except Denmark⁸, proportionately to their gross domestic product.

⁷ "Declaration on the operational capability of the Common European Security and Defence Policy", annex II of the Presidency Conclusions, Laeken Summit, December 2001

⁸ According to its opt-out clause concerning defence issues

1.6. The decision-making process and financing mechanism of the ESDP

"Operating expenditure to which the implementation of those provisions gives rise shall also be charged to the budget of the European Communities, except for such expenditure arising from operations having military or defence implications and cases where the Council acting unanimously decides otherwise.

[...]

As for expenditure arising from operations having military or defence implications, Member States whose representatives in the Council have made a formal declaration under Article 23(1), second subparagraph, shall not be obliged to contribute to the financing thereof." Treaty on European Union, Article 28.

According to the Treaty on European Union quoted above, the general rule for contributions to mutual defence issues is based on voluntary involvement, countries which do not want participate remaining the right to stay out of an operation, by making a "formal declaration". This financing mechanism has positive and negative aspects. To understand why, a comparison between two extremes models is clarifying:

• A financing scheme based upon funding commensurate with national gross domestic product is clearly the most fair, since contributions are related to the individual "ability to pay". Member States do not choose their level of provision, which thereby prevents from risks such as free-riding by reducing the scope for strategic behaviors. However, this mechanism is not really suitable for issues concerning a common defence as the European one. Indeed, EU does not have its own army, at least nowadays, but a military force constituted by national troops made available for common operations by member States. Pooling the costs is then a very complex affair. A second and probably more important reason is that such a mechanism requires a consensus about a military intervention and also about its size. However, it implies a long decision-making process, whereas a rapid reaction is often better in crisis-management issues.

⁹ "When abstaining in a vote, any member of the Council may qualify its abstention by making a formal declaration", Treaty on European Union, Article 23

• The opposite scheme would be built upon a completely voluntary basis, i.e. each member States sets its contribution freely, with no obligation to take part in an operation, and finances its own participation according to the "costs lie where they fall" principle. This scheme has for main advantage to be more flexible than the one above, and thereby enable the EU member States to react quickly to a crisis. However, such a model needs an appropriate decision-making process in order to be effective. Thus, only participating countries should have a voting right regarding the operation they are involved in. Otherwise, the alliance would face with the same slowness than in the opposite model. This mechanism is nevertheless not perfect. Its first disadvantage concerns a potential under-provision, since the number of participating counties and their contributions are expected to be lower. Another drawback is that strategic behaviors may occur, because some participants can have incentives to contribute less, expecting that other countries would increase their effort and so see the total provision conform to their real wishes. Once again, an under-provision may occur. However, the complete free-riding risk (no contribution at all) is reduced by the participant-voter process.

The financing process of EU missions is close to the second model described above, satisfying thereby the Treaty on European Union's statement. Thus, there were originally no common budget devoted to military operation made in the framework of EU, and the financing of the alliance was supposed to be relied only on member States' goodwill. By doing so, European governments make the choice of a limited ambitious defence cooperation, since it appears clearly that the EU is still far from disposing of its own supranational army financed by a specific budget, as expected by the most pro-integration proponent. EU member States' choice expresses obviously a desire for preserving their sovereignty in defence issues, by keeping a control on their external policy in last resort.

However, a step towards a more integrated financing process have been recently done with the implementation of the Athena mechanism by the European Council on 1 March 2004. It aims to charge the common costs of missions having military or defence implications to a specific budget, funded by all member States (except of Denmark) proportionately to their GDP. Another objective is also to increase EU force's reaction, by providing an immediate financial resources to launch an operation, whereas States' contributions are often suffering from a time-lag, due to political debates at the national level. Common costs targeted by Athena are expenses during the preparatory phase as well as those during the active phase. Are concerning, amongst other things, transport and

travel costs, administration, communications, barracks and lodging, or infrastructures. The financing mechanism is therefore hybrid, with common costs shared between all member States and related to their GDP, and individual expenses are burden by the participants according to the "costs lie where they fall" principle. However, the decision-making process remains the same than before Athena implementation, that is to say only contributors to an operation can vote about decisions regarding this one, and non-participants do not have any decision power even if they contribute to the common expenses. It results from it a consensual mechanism, which aims to take into consideration the non-compulsory participation to defence operation, while seeking to implement a most fair sharing of the expenses. Despite its current low impact (common costs represent about only 10% of total costs¹⁰, which means that the most part of EU military missions rely on member States' goodwill) some see in the Athena mechanism a preliminary to a total pooling of defence operations' expenses.

1.7. Past and current missions of the European Union

Since 2003 and its first intervention in the ESDP framework, the EU have been engaged in several missions with military, civilian or police scope, on the African, European and Asian continents. Are listed below missions we are interested in, those with military implications (see appendix I for more informations, especially about national contributions to these missions).

• European Union Military Operation in the former Yugoslav Republic of Macedonia (EUFOR Concordia), 2003: the first peacekeeping operation launched by the EU. This mission was conducted in close links with NATO, which also provide its support and capabilities to EUFOR force, as the EU was not completely able to conduct an operation by itself at this time. The total strength was quite modest, since 320 troops were provided. Furthermore, at the exception of France which provided 82 troops, all other countries' involvement was merely symbolic, with no individual participation over 10 troops. Almost all European countries involved tough and thus showed their implication in the ongoing ESDP.

¹⁰ According to WEU Assembly, Press release May 2008

- European Union Military Operation in the Democratic Republic of Congo (Operation Artemis), 2003: the first EU peacekeeping operation outside of Europe. This is also the first mission conducted without NATO support. Once again, the main contributor was France, with more than 80% of the troops provided. The operation was based on French infrastructure too, as its air base already located in Democratic Republic of Congo. 12 member States (or future member) and 2 non-member States (Brazil and South Africa) were involved into this EU operation, providing a total of 1968 troops.
- European Union Military Operation in Bosnia and Herzegovina (EUFOR Althea), 2004. This mission has replaced a NATO operation in place since 1995. 24 EU member States (or future member) take place in the EUFOR Althea operation, and 9 other countries, for a total provision of 6610 troops. Comparatively to the previous EU intervention described below, the contributions are better divided between participants, with no dominating country. The mission is still currently ongoing, but the force have been reduced in 2008 to 2173 troops.
- European Union Military Operation in the Democratic Republic of Congo (EUFOR DR Congo), 2006. It was an temporary operation launched by the EU in support of the UN mission already established, in prevision of the Democratic Republic of the Congo general election held on 30 July 2006. 2275 troops were provided by 16 EU member States and Turkey, with prevailing contribution of France and Germany.
- European Union Military Operation in Chad and the Central African Republic (EUFOR Tchad/RCA), 2008. It is the latest mission launched by the EU, with the objectives of protecting refugees and ensuring the safety of UN and non-governmental organizations. At the beginning of the operation, 3872 troops were deployed by 15 countries of which 13 EU member States, and other participants are expected in the following months. France is from far the main contributor to the force, whereas usual important providers as Germany or United Kingdom stay for the time being out of the operation.

Part II. A theoretical approach of defence alliances

Cooperations between countries concerning defence issues are not a new matter, and have been the subject of many studies during the last decades. Indeed, since the question of the supplying by the participants to the cooperation cannot be ignored, the economic theory sheds light on the organization of such alliances. This literature thus brings us some elements to understand the functioning, and also the malfunctioning, of the European cooperation.

2.1. The European defence as a supranational public good

According to Paul Samuelson's definition, defence is classified as a public good, since both conditions of non-rivalry and non-excludability are fulfilled. It means, respectively, that an individual's consumption of the good does not impede the consumption by another one, and that it is not possible to exclude anyone from its benefits. But contrary to the classical model of defence as a national public good, the European security has properties resulting from its property of transnational public good. Indeed, if NPGs are provided by nations for themselves, and therefore there is no way for cheating since the benefits does not spill over to other nations, the provision of a TPG results of dealings between the participants, which can lead to strategical behaviors and, in fine, to under-provision. Thus, for example, in the absence of defence transnational cooperation (such as NATO or EU), France would depend only on its own military forces to guarantee its security, with no possibility to rely on other countries' defense capabilities, and therefore would have strong incentives to assume the financing of its defence. But in the context of military alliances, some countries can have a temptation to rely on their partner for assuming the financing of the common force, and thus to reduce their own contribution. Consequently, if this kind of behavior is significantly widespread into the alliance, the total amount of contribution will be under optimal.

Among TPGs, a distinction may be done between global public goods, of which scope is worldwide, and regional public goods which concern a specific region, as the European common defence. Todd Sandler¹¹ specifies their particularities, both GPGs and RPGs

¹¹ Todd Sandler, "Regional Public Goods and International Organizations"

having their advantages and disadvantages. Thus, according to Sandler, the factors which makes RPGs easier to provide than GPGs are: a lower amount of participants facilitating the decision-making process and making more obvious the strategical behaviors, existing infrastructures which simplify the cooperation, a higher promiscuity between participants, and frequent interactions among participants. These elements seems to be particularly relevant concerning the EU, except maybe for the amount of participants, quite high in the ESDP. On the other hand, RPGs presents inconveniences comparing to GPGs, among which the absence of a leading nation or rivalries between members. Once again, it can be applied to the EU: there is not one major country, able to lead the alliance like the United States within NATO, but several influential members. Concerning the potential rivalries among members, it appears obviously that EU countries does not always agree about issues concerning foreign security, the recent discords concerning the Iraq War confirming that the EU is far from speaking with one voice.

Furthermore, it should be noticed that even if defence is usually considered as the archetype of pure public goods, the ESDP in its current form - that is principally peacekeeping and crisis-management issues - covers many aspects so that it can be described as a joint product. In other words, it take on the characteristics of different types of goods. Indeed, such activities can provide various outputs like an increased world stability (GPG), an enhanced safety on the EU territory (RPG), or contracts opportunities for companies of participant countries for the rebuilding of the ruined region (private good). Thus, for Todd Sandler and Keith Hartley 12, "peacekeeping activities give rise to joint products whose outputs display a variety of publicness".

2.2. Contributions to the alliance and aggregation technology

Another important aspect with respect to the provision of a public good concerns the aggregation technology suitable for the contribution process, in situation of voluntary provision. Is analyzed here how the individual contributions affect the total amount of public good, and the implications for the burden-sharing. Depending on it, the incentives for individual contributions and the scope for strategical behaviors will be more or less important, and therefore the total level of provision will be more or less optimal.

¹² Todd Sandler and Keith Hartley, "Economics of Alliances: The Lessons for Collective Action"

The different technologies of aggregation of individual contributions to a public good have been listed by Jack Hirshleifer¹³ as following:

- the first and most simple aggregator is *summation*, in which the total level of provision is given merely by the sum of all individuals' contributions. A property of this aggregator is that each individual's contribution are perfectly substitutable with others' contributions since an unit supplied by one participant is equivalent to an unit supplied by another one. The main difficulty resulting from the summation technology concerns the weak incentives to contribute, since participants might be inclined to rely on their partners for assuming the provision of the public good. Thus, free-riding behaviors are likely to occur within the alliance and, consequently, the total amount of public good provided might under optimal. Concerning RPGs like the European common defence, a solid framework is required to organize the contribution process and thus to prevent members to adopt such behaviors. In many cases however, there is no supranational government able to coordinate individual efforts.
- for some specific public goods, the aggregate level of provision is fixed not by the sum of participants' contributions but by the smallest individual contribution. In such situations, this is the weakest-link aggregator which applies. For example, the security of an international network can be assimilated to that kind of public goods, since the network will fail where the level of provision is the lowest, leading to the collapse of the whole network. The collective provision of a weakest-link public goods is characterized by strong disincentives to provide more than the individual minimum contribution, as these additional efforts would be without effect on the total amount of provision. It can be a particularly delicate issue when the member of the alliance have different preferences and means, as it seems to be within the EU concerning defence issues (see part IV). However, the risk of pure free-riding is eliminated because it would lead to the non-provision of the public good. But strategical behaviors remain possible, the poorest country being likely to cheat on its real capacities, expecting thus that wealthier members would assume a part of its contribution.

A variant form of this aggregator is the *weaker-link*, in which the participant with the lowest contribution has the greatest impact on the whole provision of the public good, the second participant with the lowest contribution has the second greatest impact, and

¹³ Jack Hirshleifer, "From Weakest-link to Best-shot: The Voluntary Provision of Public Goods"

so on. In other words, each contribution count but less and less. Consequently, the disincentives to provide beyond the minimum level are reduced, since these additional contributions affect, even in an attenuated manner, the total amount of provision.

• In contrast with the weakest-link aggregator, the *best-shot* applies when only the largest contribution set the whole amount of public good provided. Therefore, there are strong disincentives for the other participants of which efforts are useless, and a waste of resources for those who attempt nevertheless to contribute to the public good. In consequence, the provision should be organized in order to avoid competition between the contributors. As an illustration, over the past few years the EU has emphasized the need for an improved cooperation, deploring the unnecessary duplication of defence efforts.

Following the example of the weaker-link, the *better-shot* concerns less extreme cases than the best shot. When it applies, the highest contribution has the greatest impact on the total level of public good's provision, the second highest contribution has the second greatest impact, and so on. It means that each contributor has a marginal effect on the overall provision, but largest levels of contribution have a greatest marginal productivity. In consequence, the need for cooperation is reduced comparing to a best-shot situation.

Concerning EU member States' contributions to the ESDP, the relevant aggregator depends on the type of public good concerned. Thus, the supplies of troops, aircrafts or vessels to a peacekeeping operation are substitutable - 10 troops provided by Germany can be replaced by 10 Italian troops - and the total amount of provision is given by the sum of individuals' contributions. Therefore, the summation aggregator applies, with its consequences concerning free-riding risks and lack of incentives to participate. The best-shot aggregator is relevant concerning, for example, intelligence which is essentially assumed by French and German satellites. Another example is research and technology in the field of defence, rather characterized by competition than by cooperation between European countries.

Consequently, the process of contribution to the European common defence can be analyzed in multiple ways, depending on the aggregation technology suitable. However, in the followings sections, the contributions to the ESDP will be mainly examined through the summation aggregator, principally because the analyzes concern the provision of troops to peacekeeping operations.

2.3. The criteria for collective action

It is an obvious fact that the development of a common action, based upon voluntary provision as the EU defence policy, requires a certain level of agreement between the participants, concerning the means and the objectives. But according to Todd Sandler¹⁴, such an agreement does not insure the provision of the public good. Indeed, the likelihood of a collective action to be set up depends on four criteria which are:

- the presence of a leader country with a determinant influence on the provision of the public good;
- a low level of uncertainty;
- a limited number of participating countries;
- a significant part of nation-specific benefits comparing to transnational public benefits.

The objective in this section is not to attempt to analyze the individuals' strategical behaviors or to explain why the contributions are unevenly distributed, but to examine the success - or the failure - of the ESDP until now considering the criteria above. It must be noticed that Sandler originally applied its model to environmental public goods as reducing the greenhouse gases, but can be generalized to any collective action. Thus, this model have been applied to the European defence by Christoph Raab ¹⁵ to analyze the likelihood of collective defence operations within the EU framework.

The first criterion, that is the presence of a major country, implies that when the alliance includes a member able to take a leadership role, the public goods is more likely to be provided. Indeed, this major country is supposed to guide the other members in the alliance. Sandler explains that when the United States decides to limit its emissions of chlorofluorocarbons, it greatly influences the other countries' decision to do the same, whereas if the decision is took by a smaller country, for example New Zealand, the impact on other members is from far lower. Concerning the EU defence, there is no one member able to lead the alliance as the United States does in the NATO alliance, but four main countries with significant capacities. However, in practice, France takes the role of the leader country in most of the operations, but does not seem to be really able to drag other members into the common force.

¹⁴ Todd Sandler, "Global and Regional Public Goods: A Prognosis For Collective Action"

¹⁵ Christoph Raab, "Defence Cooperation in the EU: the Added-value of Public Good Theory"

The second criterion concerns the degree of uncertainty, which is an obstacle to the collective action. Participants must have a good understanding of the situation before getting ready to act. Applied to the European defence, this criterion gives quite poor results. By definition, peacekeeping interventions take place in region in crisis, with therefore a high degree of uncertainty, but it does not impede NATO or UN operations to be successfully conducted. The understanding of a crisis case is actually variable, depending on the participants' informations on the region considered. Thus, for example, France has probably a higher knowledge of the situation in Chad than most of EU members because of its historical links with this country. It is however difficult to measure the degree of uncertainty concerning peacekeeping issues, which remains in any case significant.

A small number of participants is also required in order to maximize the likelihood of the public good's provision. The general principle is that the fewer the participants are, the better the alliance will work. Indeed, the decision-making process is time costly, and each additional participant reduces the chance of agreement concerning the objectives, the means, or the total level of provision. On the other hand, a sufficient number of participants is required to develop quite ambitious collective actions such as a common defence force. Therefore, there would be an optimal size for the alliance, *i.e.* a trade-off between costs of decision-making and benefits in terms of higher capabilities from additional contributions. In the EU, the number of participants to the ESDP is potentially high, even if in practice not all the members get involved in each operation. Agreements are consequently arduous to reach, particularly considering the various preferences concerning defence issues (see part IV).

The last criterion is about the share between nation-specific benefits and transnational public benefits. Thus, more participants have particular interests to the collective action, more likely the public good will be provided. Todd Sandler explains the success of the sulphur-induced acid rain curbing program by this principle: since about 50% of sulphur depositions fall on the emitter nation's own soil, the incentives for collective action are very high. On the contrary, nitrogen oxides emissions being more volatile, the nation-specific benefits are smaller, which explains that the actions for curbing these emissions remain quite modest. The application of this principle to the European defence cooperation is quite challenging, because the nation-specific benefits of peacekeeping operations are quite arduous to measure, but it gives nevertheless some clarifying results.

The transnational benefits of such interventions, for their part, are easiest to highlight: increase the world stability, secure the international stage, or consolidate democracy. But, according to Sandler's principle, the transnational benefits cannot explain by themselves the realization of the collective action. The nation-specific benefits are less obvious, but may concern for example economics interest in the country of intervention, particular care on a region because of historical close links, or proximity with the troubled area. Thus, assuming that France has highest specific interests in some African countries than other EU members, the large part of the French involvement in the EU peacekeeping operations concerning African countries can be explained through the nation-specific benefits principle. In the same manner, the EU countries with the largest involvements (relatively to their GDP) in the peacekeeping mission in Bosnia and Herzegovina are those which are geographically close to the former Yugoslavia.

In conclusion, the criteria for a collective action are not really fully satisfied in the case of the European defence cooperation. Indeed, even if there are some major countries with stronger defence capabilities, there is no one country with a significant influence on other members, able to play a powerhouse role, like the United States within NATO. The important number of participants makes complex agreements on the collective action, and the degree of uncertainty is by definition high concerning defence operations. Finally, the nation-specific benefits are variable, depending on each particular case. Consequently, a cooperation based upon voluntary contributions is likely to be unsuccessful. However, in contradiction with this prognosis, some projects have been in practice materialized through the ESDP, and a few interventions have been launched over the past few years. One reason for that might be the historical particularity of the EU, of which members have a long experience of cooperation and lean on solid institutions. Their background concerning collective alliance therefore enable them to override the pessimistic prognosis above. Todd Sandler's criteria are not nevertheless totally irrelevant concerning the European defence cooperation, since they provide at least elements for explaining the degree of achievement of this cooperation. Thus, the moderate success of the common military interventions, concerning for example the uneven participation of member States, may be related to this analysis.

Part III. The European common defence: an empirical analyze

Because the European cooperation on defence and security issues still has a recent history, the hindsight about the common activities is limited. Any categorical conclusion concerning its success or failure would therefore be premature. In the same manner, analyzes concerning the burden-sharing of common operations must be observed with care, since only a few interventions have been launched for the time being. In other words, future developments of the cooperation are likely to lead to a reconsideration of the results presented below. The present and next parts should consequently be considered as a picture of the cooperation until now, while taking into consideration that the ESDP is still fledging.

3.1. EU defence interventions and burden-sharing of collective actions

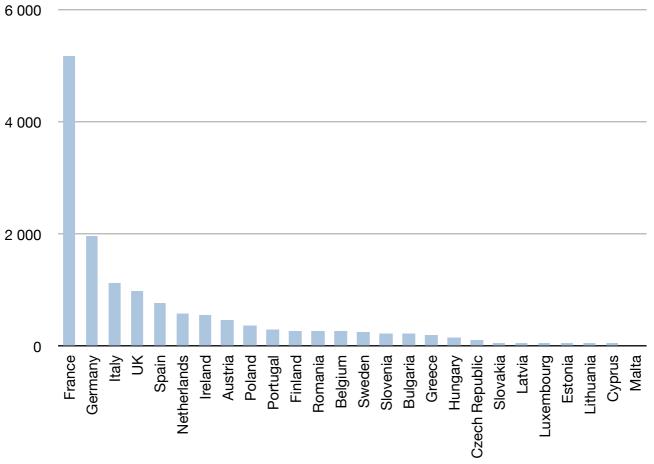
Some empirical studies of the burden-sharing concerning defence alliance have been published over the past decades (Olson and Zeckhauser [1966], Russett [1970], Sandler and Forbes [1980]) in order to seek if the financing of the alliance is unevenly shared, i.e. if the exploitation hypothesis is verified or if free-riding behaviors are observed. The exploitation hypothesis means, when it occurs, that the smallest countries rely on the largest members of the alliance, the latter providing a part of the public good higher than their benefits. This is a typical scheme of the collective provision of defence within the NATO framework, since the United States usually bore a part of the total provision from far higher than its benefits, whereas European countries were charged of benefiting from this situation. Thus, most of the studies of the burden-sharing concerning defence alliances deal with the national provisions to NATO. The potential disproportion of contributions between participants are measured in quite different way, but an indicator commonly used is the ratio between the national military expenditures and the national GDP. Indeed, the military expenditures are considered as the individual contribution to the public good, while the GDP gives a measure of each ally's ability to pay. By comparison with other participants, if a member's contribution is significantly and durably higher than its ability to pay, then it assumes a disproportionate burden. Other studies aimed to include in the measure of burden-sharing the national benefits of membership to the alliance, by integrating for example the members' population, or their "exposed" borders to nonmember states (Sandler and Forbes, 1980).

However, these methods are not really appropriate to the EU defence cooperation, since its scope is noticeably less important, concerning for the time being quite only crisis-management operations outside of the EU territory. Thus, the national military expenditures cannot be a relevant measure of the individual contributions to the cooperation, the member States' provisions being quite modest comparing to their capabilities. National military expenditures rather display individuals' preferences concerning defence in general terms, that is their "militaristic" or "pacifist" profile (see part IV). The member States' GDP, however, give a satisfying measure of individual ability to pay, even if the comparison with national contributions to the EU operations let appears some bias, due to the too modest amount of total provision.

A observation of the EU member States' contributions to the different peacekeeping operations launched in the framework of the ESDP from 2003 to 2008 gives some general observations (see figure 1 and appendixes for detailed data). Firstly, the common forces are, as expected, mainly provided by the major European countries, whereas the smallest ones offer a very modest contribution. Secondly, the burden-sharing appears to be very unequal, even amongst countries with similar profiles. Thus, France provides alone more than one third of the total amount of troops, while United Kingdom's provision is five times lower, even if both countries have quite similar GDP and defence capabilities. Thirdly, the contributions until now are very far from those declared during the Capabilities Commitments Conference in 2000 (see part I), which aimed at the formation of a potential force of about 100,000 troops at the end of 2003. These declared contributions were however proposed for informative purpose only, with no compulsory commitments for the future, but the difference with the real involvement in the ESDP operations is quite impressive.

Amongst the four countries supposed to lead the ESDP, only France and, to a lesser extent Germany, involve strongly in the common forces. Moreover, a detailed analysis of the different interventions of the EU shows that France provided the main part of the common force in four out of five operations, which could likely not have been launched without the French support. In other words, the European military cooperation is, until now, principally kept afloat by the French involvement. On the other hands, the smallest countries offer a contribution principally symbolic to the alliance.

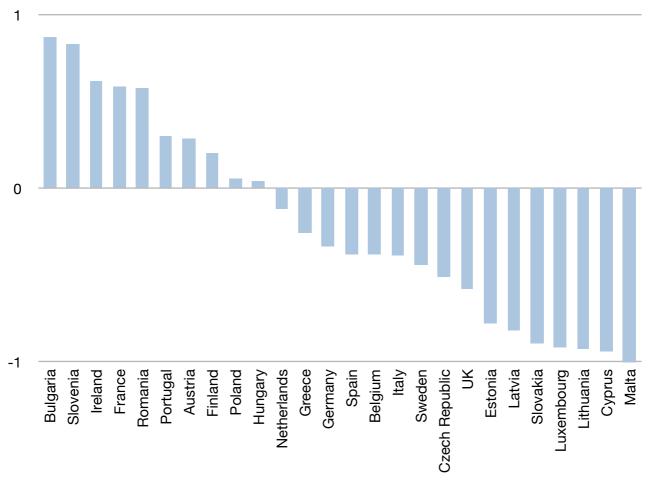




In order to measure how fairly or unfairly the contributions are shared among the member of NATO, Olson and Zeckhauser¹⁶ proposed to compare the nations' military expenditures to their GDP, since the latter gives a good estimation of the individual ability to pay. By replacing the EU members' military expenditures, which are not really relevant as an estimation of their provisions in the case of the European defence cooperation as seen above, by their contributions to the ESDP operations, a measure of the burden-sharing fairness is possible. Thus, the figure 2 displays a comparison between each member's share in the total contributions, and their part in the total GDP. As an illustration, the contributions of France to the different EU peacekeeping operations represents about 38% of the total provisions, whereas its GDP represents about 16% of the total EU GDP. Consequently, its involvement in the common forces is out of proportion with its ability to pay.

¹⁶ Olson and Zeckhauser, "An Economic Theory of Alliances", 1966

Figure 2. Common defence burden-sharing and GDP (2005) (sources: SIPRI, World Bank)



The graphic above must be interpreted as following: a value approaching 1 means that the share of the country in the total provision is from far higher than its share in the total GDP, whereas a value tending to -1 has an opposite meaning. When the ratio is close to 0, the member's parts in the whole contribution and in the EU GDP are quite similar (see appendix II for further informations). Thus, are displayed fairness of the individual contributions, assuming that a fair burden-sharing relies on members' GDP. "Generous" countries are therefore those with a ratio superior to 0, whereas the members with a negative ratio supply less than they could.

However, theses informations must be interpreted with care, since data concerning countries with low GDP and/or low contributions are very volatile. Thus, an additional contribution of only 50 troops by Slovakia would make the country having a positive ratio. The analysis is therefore more robust for the largest countries than for smallest members.

The results concerning the littlest countries seem to suggest that the exploitation hypothesis can be verified. Indeed, if their ability to pay is very low, their part in the whole contributions is even lower than their share in the total GDP. Are concerned the smallest countries of the EU (Luxembourg, Cyprus and Malta, the latter displaying a ratio of -1 because having never sent any troop to the common operations), the Baltic countries and Slovakia. It tends to confirm the common fact that, in a collective alliance based upon voluntary provisions, the smallest members often rely on the largest ones to supply the public good. However, in the case of the European defence cooperation, such a conclusion must be moderated. Thus, it does not appear either that the major EU members assume a disproportionately high share of the provisions, at the exception of France. Countries as Germany, Italy, United Kingdom, Spain or the Netherlands, of which a strong involvement is expected for the credibility of the ESDP, do not participate as much as they could in the common forces. Finally, among the countries with a significant participation to the European operations comparatively to their GDP, only France appears as a major EU member, which invalidates the exploitation hypothesis.

This analysis, however, concerns the individual participations to the *whole* EU peacekeeping missions, and therefore hides that the countries' involvements in the different missions are shifting, from the countries which take part of most of the operations, to those with occasional participations. Thus for example, Bulgaria, of which ratio is very high, get actually strongly involved in only one EU operation in Bosnia, and did not take part to the other interventions. Consequently, complementary observations, concerning the individual involvements to the different operations, are required.

3.2. A cooperation characterized by fluctuating involvements

The burden-sharing of European peacekeeping operations, considered as a whole, appears quite clearly unevenly distributed among member States, as seen above. But observed one by one, the common interventions display various degree of fairness concerning countries' involvement, explainable by different reasons. Thus, the present section aims to give some indications about the success of the cooperations, and to provide suggestions concerning the determinants of the member States' decision to participate or not to these operations.

Until now, the EU peacekeeping intervention with the most well-distributed involvements is from far the operation in Bosnia and Herzegovina, launched in 2004 and still ongoing. Indeed, this mission succeeded in gathering most of the ESDP members, only Malta and Cyprus remaining out of the alliance, and is characterized by a strong participation of the major European countries, especially Germany, Italy and United Kingdom. It is also the largest operation developed by the EU, both in terms of troops mobilized and of length. The success of the intervention can be explained by different reasons.

Firstly, this missions took over of a NATO operation previously in place with the same purpose. Consequently, a large part of the participants to the intervention were actually already involved in the NATO framework, and remained in place under the EU control. Consequently, the ESDP intervention owes a large part of its achievement to the Atlantic alliance, which succeeded in gathering the countries involved. It also explains that an quite important part of the participants States are non-EU members.

Secondly, a significant participation (relatively to their GDP) is observed from countries such as Albania, Bulgaria, Greece, Hungary, Romania or Slovenia. All these countries have a contiguous border with the ex-Yugoslavia or were formerly part of it, which probably explains that they feel more concerned by this operation. The geographical proximity with the troubled area is likely an important factor for the involvement in a peacekeeping intervention, since the benefits of a pacification are supposed to be higher for neighboring countries. In addition, according to Todd Sandler's criteria (see part II), most important is the part of nation-specific benefits comparing to transnational benefits, higher are the incentives for the countries to participate to the collective action. Generally, almost all EU member States might consider with care a crisis situation inside the European territory. Their large involvement in the intervention, in terms of contributions to the alliance and of durability, is therefore not surprising.

On the other hand, the three missions launched by the EU in Africa are characterized by very uneven participations. In each case, the main part of the troops provided are from France, with nevertheless a sizeable involvement of Germany in the second mission in the Democratic Republic of Congo. Once again, the nation-specific benefits principle can apply, since the quite low participations of other EU member Sates may be related to their few interest for issues concerning Africa, comparing to France. Indeed, because of its historical close links with some African countries, France is more likely to feel concerned by a crisis situation in the African continent. The proximity is here not geographical as in the mission in Bosnia, but rather based upon long-time relationships. As an illustration of

these close links, France is the first trading partner of Chad, far ahead of its neighboring countries as Cameroon or Nigeria¹⁷. In the same manner, Belgium provided sizeable contributions to the interventions in the Democratic Republic of Congo, which is a former Belgian colony.

In addition, France took naturally a leading role in these operations because of its previous presence in the concerned regions. Thus, the operations in the Democratic Republic of Congo were developed using French infrastructures on the premises. France has also a military presence in Chad for a long time, through the Opération Epervier. Consequently, its knowledge of the area of intervention is most probably higher than the main part of other EU members. According to Todd Sandler's principle concerning the degree of uncertainty - that is higher is the nation's understanding of the situation, likely is its participation to the collective action -, the greater experience of France in these regions might be an explanation of its larger involvement in the operations.

Other determinants of the fluctuating participations of member States to the common forces are their various preferences concerning defence issues, in terms of defence expenditures or of framework of intervention. Indeed, some EU countries attach few importance to military matters because of being neutral, whereas others prefer supply theirs capabilities to different alliances, such as NATO or the UN. Thus, higher the heterogeneity between the participants is, more tricky is an agreement to find concerning the means and the objectives. The following part provides therefore an analysis of these national preferences and their consequences on the member States' involvement in the common operations.

¹⁷ Source: CIA World Factbook 2004

Part IV. A defence cooperation within a heterogeneous area

Considering the European Union history, the success of a supranational cooperation requires a convergence between national preferences, that is a certain level of agreement about the orientation of the common policy, the objectives and the means. Thus, for example, the economic and monetary union owes its achievement to the homogeneity of its members, which have been guided by the "convergence criteria" for this. However, concerning the CFSP, no such criteria have been defined, although a wide range of preferences about defence issues appears between EU member States, like various efforts in terms of military spending or preferences for defence cooperation such as NATO or UN . This heterogeneity may implies a low ambition for the cooperation, since the consents concern an only limited scope.

4.1. The PESD and the variety of its members

From Malta to United Kingdom, the EU is characterized by the diversity of its members in term of defence orientations and military capabilities. While, for example, some of them made the choice of neutrality, others take particular care to maintain strong defence forces. Therefore, building a common defence policy while national defence preferences and capabilities differs is no easy task.

4.1.1. Military forces and defence preferences in the EU

A comparison between member States' military expenditures lets appear huge differences and a concentration of a large part of defence effort into major countries (see figure 3). Thus, as expected, United Kingdom and France come as the two main military powers in EU. Both countries are traditionally the European leaders in terms of military capabilities, and are also important protagonists in the international stage - their status as nuclear powers for example illustrates this leading position. They are followed by Germany and Italy, of which defence capabilities are quite lower however, regarding their GDP. These

four countries concentrate about 73% of the whole defense expenditures, the 22 other EU member States representing only the last quarter of the European military total spending 18. Amongst member States of the EU before 2004 and apart from the four major countries listed above, only Spain, the Netherlands and Greece dispose of a relatively consistent force, the remaining members' expenditures being sensibly lower, likely because of their neutral position (Austria, Finland, Ireland, Sweden), quasi-neutral (Belgium), or because being too small for having sizeable capabilities (Luxembourg).

Figure 3. Military expenditure (US\$ millions) of EU member States in 2006 (source: SIPRI database) \$60 000M \$50 000M \$40 000M \$30 000M \$20 000M \$10 000M \$0M Portugal Finland Austria Romania Hungary Ireland Slovenia Greece Poland Latvia United Kingdom Germany Italy Spain Sweden Belgium Czech Republic Lithuania **Vetherlands** Slovakia _uxembourg

¹⁸ Because of its non-participation to the CFSP, Denmark is not took into account into these data.

The recent member States, for their part, do not increase greatly the EU military expenditure, most of them having modest defence capabilities, while they extend the amount of concerned actors. The last enlargements made therefore the common defence more complex to build without improving significantly its potential strength.

Finally, the comparison between national military spending provides two main informations. Firstly, the common defence is greatly dependent on the major EU countries, of which goodwill is a determining factor of the alliance's success. The other member States seem to be only able to bring their support to the common force, but not to run an significant operation by themselves. Secondly, the military capacities appear very unevenly distributed between participants, which can be classified as following: major countries with important capacities, able to lead the alliance; medium-sized member States with sizeable capacities and which can provide a quite substantial support to the cooperation; small countries, modestly equipped and with a marginal role.

The total amount of military expenditures within the EU for the year 2006 is about \$250,000 millions. This is half as high than the United States (\$511,187 millions in 2006) and makes the EU the potential second defence force in the world, far ahead of other powers like China or Russia. However, such comparisons might be interpreted carefully, since it gives only informations about the *potential* European military power, whereas the common EU defence concerns currently very less significant forces and specific objectives, representing a few part of military expenditures. Moreover, this potential military power is likely overestimated, because of duplication of defence effort amongst EU member States.

Another useful indicator of national orientations is given by the ratio military expenditures/ GDP (see figure 4). It gives an idea of member States' defence policy by revealing their defence effort, that is to say their preferences concerning their foreign security. The diagram below displays a wide range of preferences, from the most "militaristic" countries to the most "pacifist" ones. Thus, the defence effort made by Greece is eight times higher than the Irish one's. The case of Greece is however particular because of its conflicting relationship with Turkey. Then, among the 'militaristic' countries, come again United Kingdom and France with expenditures representing more than 2% of the GDP. The recent EU member States' defence efforts are globally quite high comparing to older members, which indicates that their relatively weak military capabilities are not a consequence of lack

of interest for defence issues, but rather of a shortage of financial means. On the opposite side, some countries present a small desire for increasing their military strength, despite having the financial capacity for it. Are particularly concerned here Ireland, Luxembourg, Austria and Belgium, with defence expenditures around or inferior to 1% of their GDP.

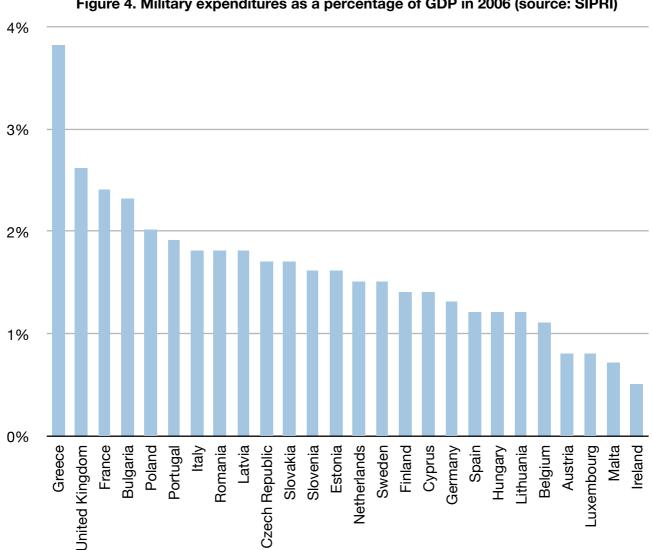


Figure 4. Military expenditures as a percentage of GDP in 2006 (source: SIPRI)

4.1.2. Consequences on member States involvement in the ESDP

The national defence capabilities of course determine the place of each member State in the construction of the ESDP. Thus, when having a look on the contributions to the Helsinki Headline Goal (see table 1), we notice with no surprise that the main contributors are those who dispose of the highest capabilities, according to the amount of their annual expenditures. It confirms that a common defence within the EU is not viable without the support of its major countries. Generally, national involvements in the HHG were very closely related to member States' capabilities (see figure 5), which expresses, at least at the beginning of the ESDP, a sharing of contributions based upon individual means.

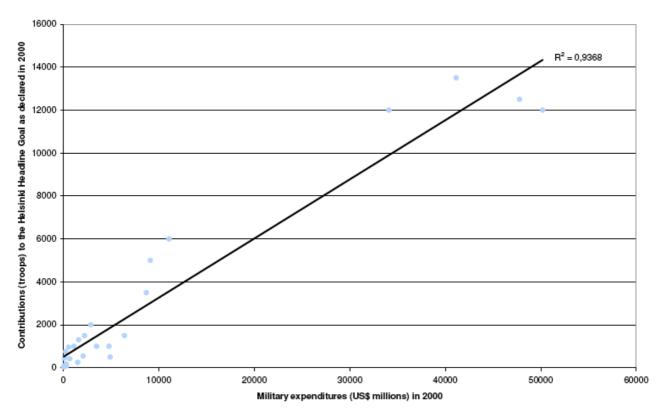


Figure 5. Contributions to the HHG and member States' military expenditures in 2000 (source: SIPRI database, Berlin Information-center for Transatlantic Security)

On the other hand, a higher participation of "militaristic" countries, *i.e.* those with a strong defence effort, than "pacifist" members would have been expected, as an expression of their defence preferences through their involvement into the ESDP. However, no such a relation between defence effort and contributions to the HHG clearly appear. Indeed, as an illustration, Greece's involvement was not superior to the Netherlands' one, despite both countries have comparable defence capacities and that Greek defence preference is obviously higher. A similar result is observed with the four major countries' involvement, among which France and United Kingdom, both more 'militaristic' countries than Germany and Italy, did not announce to contribute more than the latter to the common force.

It can be concluded of it that the participations to the HHG were rather a matter of *capabilities* than a matter of *defence preferences*.

However, when applied to the contributions to the ESDP peacekeeping missions, no significant relation appears between the individual participations and either defence capabilities and defence effort. It does not mean nevertheless that EU members' defence preferences have no incidence on their involvement in peacekeeping operations, but rather that the ESDP does not seem to be the favorite framework of intervention for the most part of them.

4.2. The ESDP's place within multiple frameworks for peacekeeping interventions

The ESDP scope of intervention, despite its recent development, is still limited comparing to previous organizations which dispose of greatly higher means and are involved in more ambitious projects. Thus, the two main frameworks for peacekeeping operations remain the UN and the NATO, both having similar objectives than the ESDP for crisis-management. The scope for EU interventions between these two organizations is therefore quite thin, since EU countries are likewise most of the time member of one or both of these alliances, which are often preferred to the ESDP by European Governments for military interventions.

4.2.1. The primacy of the UN and NATO

The UN is from far the major actor in the world concerning peacekeeping issues with 17 missions currently ongoing, with the participation of more than 120 countries¹⁹. It disposes of an important experience and significant capabilities provided by its numerous members. However, it is not the EU member States favorite framework for peacekeeping intervention, since they heavily involve in NATO operations²⁰. This second organization does not have the same experience than the UN (its first peacekeeping operation took place in 1994) and has a lower pool of participants, but has launched some quite ambitious operations with a strong support of its members. Contrary to the UN, of which

¹⁹ UN monthly report, August 2008

²⁰ See appendix III for further informations about EU member States involvement into UN, NATO and EU operations during the period 2003-2008

scope of intervention is worldwide, NATO concentrates its forces principally in the former Yugoslavia and Afghanistan.

It is in this context that the EU aims to develop its own force through the ESDP. Until now, the European missions are from far less numerous, with lower deployments and generally short-lived (in comparison with UN missions over several decades). Since countries member of the ESDP are also member of the UN and, for a large part of them, of NATO, the original purpose of the European alliance was to enable the EU to manage a crisis in which no other organization gets involved, *i.e.* to not interfere with NATO or UN activity, even if for some the long-term objective is to create a credible alternative to NATO. Furthermore, in order to avoid competition between NATO and the ESDP, their relations have been clarified through some partnership plans, such as the Berlin Plus agreement which organizes a cooperation concerning, for instance, exchange of informations or allow NATO to bring a support to EU operations. Likewise, the European force acts in close link with the UN, as for example during the operations led by the EU on the African continent.

However, in practice, EU member States have sometimes to make a choice between the different alliances they belong to, since their capabilities are not unlimited. It is therefore unavoidable that the PESD suffers from the competition with the other organizations, when its members are already involved in operations within different frameworks. This was for example the case concerning the EUFOR Tchad/RCA operation, for which some countries have justified their non-participation by invoking other heavy and costly involvements.

4.2.2. UN, NATO, ESDP and EU member States' preferences

If European countries are characterized by a wide diversity concerning their military capabilities and defence efforts, their involvements into the different peacekeeping organizations they are members of is also variable in accordance with their preferences. Thus, the ESDP does not appear to be the favorite framework for common operation for some of its members, whereas some others see in the European alliance a really credible alternative to NATO or the UN. These preferences are represented by the correspondence analysis below (see figure 6), which compares the contributions of EU member States to UN, NATO and EU peacekeeping operation during the period 2003-2008 (*i.e.* since the first mission conducted in the framework of the ESDP).

First of all, some precisions concerning the membership of EU countries to these different alliances may be done, since it obviously affects the level of contribution:

- all EU member States belong to the UN;
- 26 of the 27 EU countries get involved into the ESDP, Denmark having choose to not participate to the common force;
- 21 of the 27 EU members are also in the NATO alliance, the non-members being Finland, Sweden, Ireland, Austria, Malta (all neutral countries) and Cyprus.

These alliances are the main frameworks for peacekeeping interventions for European countries. Other multinational cooperations are quite rare, as well as unilateral initiatives. Concerning the period considered, only France participated to significant operations outside of these alliances (an unilateral intervention in Ivory Cost and a multinational force in Haiti in cooperation with United States, Canada and Chile). In addition, the importance of membership to these alliances might be moderated, because countries often get involved in alliance they do not belong to. Thus, during the period observed, Finland, Sweden, Ireland and Austria have contributed to some NATO operations.

The national preferences for the different alliances are here analyzed through the contributions to the peacekeeping operations from 2003 to 2008, once again in terms of troops provided. This method is not without raising some problems because the participation to a military operation cannot be reduced to this unique aspect, whereas countries provide a large range of support to the alliances, from the transport facilities to intelligence technologies, as well as mere financial support. Moreover, it does not make the comparisons easier since the missions differ concerning their length: providing 100 troops to a three-months length operation is not equivalent to providing 100 troops to a five-years length mission. Thus, an analysis based upon national costs of participation to the alliances would have been more relevant by taking into account all kind of contributions and overriding the time effect. Unfortunately, data concerning individual financing of peacekeeping operations are not available. Nevertheless, the correspondence analysis makes appear some trends, which can be interpreted as relative national preferences for each framework of intervention.

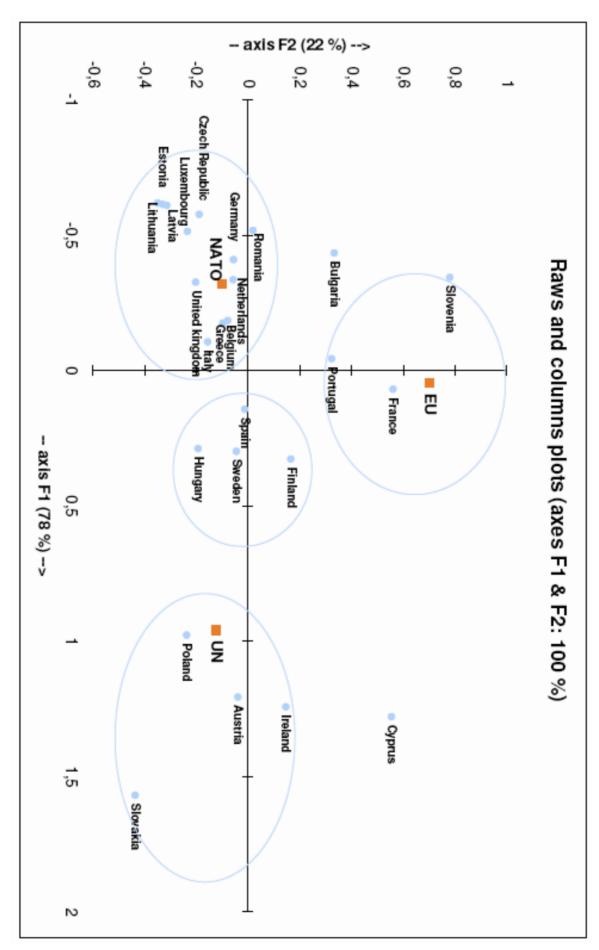


Figure 6. Correspondence analysis of EU member States contributions to UN, NATO and EU peacekeeping operations from 2003 to 2008 (sources: SIPRI, UN)

The graphic above does not display EU countries' absolute preferences, but relative preferences. In other words, are represented each member's trend towards an alliance or another, relatively to other members' preferences. For example, the ESDP is the favorite framework of France for intervention, not in absolute terms - its contributions to NATO operation are from far higher (see appendix III for further informations) - but comparing to other EU countries. Thus, the Netherlands has a preference for NATO, even if its contribution to this alliance is lower than the French one. It is because more than 80% of the Dutch contributions to peacekeeping operations are done into the NATO framework, which is a proportion greatly higher than the major part of EU countries. Consequently, the main interest of this analysis is that it overrides the size effect of each alliance, and makes therefore understandable some aspects of national preferences, whereas a mere reading of the data principally highlights the importance of each alliance comparing to others.

According to the correspondence analysis, EU member States can be divided into four categories considering their preferences:

- The pro-North Atlantic alliance: those with a relative preference for NATO framework. This is the largest group with 12 countries concerned. Amongst them, five of the seven EU members with the strongest defence capabilities: United Kingdom, Germany, Italy, the Netherlands and Greece. The Baltic States also belong to this group, with quite surprisingly similar behaviours, that is a quasi-exclusive participation to NATO operations. Most of all, at the exception of France, the countries usually at the root of the EU construction Germany, Benelux and Italy do not appears to be very interested in the European defence cooperation, which generates serious doubts concerning the viability of the alliance.
- Countries which see in the ESDP a credible alternative to other frameworks. France is
 the major country in this category, with an obvious attraction for operations lead in the
 ESDP framework. Thus, it is about one third of French participation into peacekeeping
 missions which takes place into the European common force. Few other countries have
 a relative preference for the European organization: principally Slovenia, while Portugal
 and Bulgaria seem to have mixed preferences between the ESDP and NATO.

- Countries with a relative preference for the UN. Are concerned in this category two neutral countries which do not belong to NATO: Ireland and Austria. It does not mean however that they do not participate to NATO operations, but their contributions to the Atlantic alliance remain quite modest, whereas UN appears to be clearly their favorite framework. Poland and Slovakia are also characterized by a preference for the UN interventions, although they belong to NATO. However, despite their neutrality or even if the Atlantic alliance does not appear to be their favorite organization, none of these countries see the ESDP as a satisfying alternative for peacekeeping and crisis-management operations.
- The last category concerns countries with mixed preferences between the UN, ESDP and NATO frameworks, *i.e.* they do not show a particular attraction for an alliance rather than another one, relatively to other EU member States. These countries are Finland, Sweden though both are not member of NATO -, Spain and Hungary.

Finally, France seems to be quite lonely as real a sustainer of the ESDP, the other member States having not the capacity for strengthening greatly the common force (Slovenia, Portugal, Bulgaria) or being not as much interested in the European cooperation than in the other alliances. This is particularly problematic since the EU member States with the highest defence capabilities do not see the ESDP as their favorite framework, although their participation is quasi-vital for the cooperation. In practice, it results in an over-representation of French troops in the European operations, but it is unlikely that the cooperation can be carried by only one country everlastingly.

The determinants of national preferences concerning the frameworks of intervention are likely multiple, each case being specific, but some principal motives can be highlighted. Firstly, amongst the EU countries, some have traditionally closest links with NATO than others. This is the case for example of United Kingdom, which moreover stayed in the background of some aspects of the EU integration, Germany or the Netherlands. It is therefore naturally that they continue to rely on the Atlantic alliance for being their principal framework for collective defence. On the other hand, French relations with NATO has often been ambiguous, France remaining quite suspicious towards these organization, and especially took care to stay as much as possible independent from the United States

concerning defence issues. This concern remains still relevant today, and the growth of the European defence appears for France as an interesting opportunity to build a credible alternative to NATO. The UN, for its part, offers an attractive framework for neutral countries which cannot or do not want join the NATO, but also for other EU members because of its natural legitimacy, its leadership concerning peacekeeping issues and its larger scope of intervention.

Secondly, the national preferences for a framework or another probably depend of their usual spots of intervention. Thus, France which gets traditionally strongly involved in operations concerning the African continent, opts naturally for ESDP missions since they concern mainly Africa. In the same way, countries which place importance on issues concerning Middle-East will see in NATO their favorite organizations for peacekeeping interventions, since the Atlantic alliance intervenes in Afghanistan, whereas the ESDP scope do not concerns this region for the time being.

In conclusion, the EU appears to be a very heterogeneous area concerning defence issues. Important divergences between militaristic and neutral members, or between pro-NATO or pro-ESDP countries make difficult cooperation while a minimum level of convergence is required. The viability of the cooperation is therefore in question, and its achievement on the long run is difficult to predict. The next part draws up a list a potential scenarios for the future of the ESDP, and hazards some outline for the next steps of the alliance.

Part V. Future and prospects of the European common defence

Even if the recent developments of the ESDP during the last decade have been relatively significant, notably with some common interventions over the five past years, the direction that the EU member States want to give to the cooperation does not appear very clearly. Once the alliance has shown, even not without difficulties, its capacity to carry out the Petersberg missions concerning peacekeeping interventions, the next step for the ESDP is still currently under discussion. From the countries in favor of a strongly integrated defence to those satisfied by the current model, the EU members are far from an agreement concerning the future of the cooperation. The different scenarios for the prospects of the ESDP are described below, from the less ambitious model for the alliance to the most integrated project.

5.1. The ESDP as a complement to NATO for the European defence

The less optimistic projection for the cooperation would be a collective defence remaining in its current form, *i.e.* based upon voluntary provisions, with no more coercive financial scheme. The EU would also continue to settle for its limited scope of intervention, operating only where the Atlantic alliance is not involved. Thus, the primacy of NATO on the ESDP as the fundamental framework for defence issues in the EU territory would be confirmed, the European cooperation having a minor role concerning principally crisis-management outside of its boundaries. Such a *status quo* seems to satisfy a large part of EU member States, the Atlantic alliance being the major element of collective defence of Europe since the Second World War, and the partnership with the United States appearing to be a guarantee of the stability in the Western World. The lack of interest for the ESDP from some EU members, and not the least of them, is particularly obvious when are compared their involvement in the different framework for crisis-management interventions.

Moreover, the most part of EU member States - 21 out of 27 - belong to NATO, the others remaining out of the Atlantic alliance principally because of being neutral. Consequently, the needs for a strongest European defence cooperation can legitimately be questioned. If the development by the EU of its own defence capabilities is justified by some in the

post-Cold War context, others argue that NATO remains nevertheless the appropriate framework for collective defence since North American and European countries still share the same objectives and face identical threats - that is, essentially, terrorism and nuclear proliferation.

The present form of the ESDP presents also the advantage to let the EU member States their independence about defence issues, since the participation to the cooperation remains optional. Indeed, the only mandatory provision scheme introduced for the time being concerns the common costs of the operations - shared by all member States through the Athena mechanism (see part I) - which remains quite modest comparing to the total costs of peacekeeping interventions, the latter being assumed by participating countries. Thus, the current model of cooperation suits well to the most part of EU member States, afraid to transfer their sovereignty on this sensible matter, following the example of the Economic and Monetary Union. Furthermore, the present functioning of the ESDP presents a flexible decision-making process, because each country stay free to involve or not to the common operations, and sets its contribution at a its desired level.

However, this system reduces the common forces to interventions with a limited range, the member States' participations being inevitably lower than in the case of mandatory provisions. Moreover, the mechanism is quite disincentive, since participants may be tempted to rely on others' contributions to the common forces. Consequently, as expected in the case of a collective provision of a public good with non-excludable benefits, the European defence cooperation is likely to suffer from free-riding behaviors amongst its members.

5.2. A cooperation strengthened between a lower amount of participants

Originally, the CFSP defined by the Treaty on the European Union has for purpose to include all member States in the common defence policy, at the exception of Denmark. However, a strengthened integration between countries desirous to go further in the cooperation is conceivable, once the objectives of the Treaty are satisfied through the current organization of the ESDP. Thus, even if the economic integration is pretty well achieved, the same does not hold for the construction of a strong political entity in the EU.

The Union often fails to act in a concerted voice, and the recent enlargements make even more challenging the development of common positions on foreign issues. In this context, some observers advise the EU to develop several levels of cooperation, in order to unite countries with convergent objectives concerning certain issues. Such a pragmatic approach would apply quite well to the defence cooperation, which would therefore present different degree of integration: a CFSP gathering all the EU member States in its present form and based upon the same mechanism of involvement, achieving thus the objectives of the Treaty on the European Union, and more integrated forms of cooperation between willing members, based upon more coercive scheme of contribution. In compensation, the decision-making process is facilitated, since the participants are less numerous and are supposed to have quite similar profiles. Thus, such a structure fulfills the third criterion for a collective action defined by Todd Sandler (see part II), which asserts that agreements are easier to find when a small number of countries participate to the alliance.

Concretely, this cooperation can be based on partnership between the major European members, on which other desirous countries may join. In the recent development of the ESDP, the close links between, for example, France and United Kingdom during the Saint-Malo Summit gave an significant impulsion to the European defence cooperation. The Franco-German couple is also traditionally at the root of the European construction and a strong partnership between these countries is consequently quasi-vital for the alliance. However, despite their quite similar profiles in terms of capabilities or of threats faced, Untied Kingdom, France and Germany presents divergent preferences concerning defence issues (see part IV), and the likelihood of a strengthened cooperation between them is therefore hypothetical.

Moreover, it might be reproached to such an organization to break up the EU unity, and potentially to leave aside from the cooperation the member with low capabilities. The risk of a two-speed Europe, with peripheral countries less integrated than those in the heart of the Union, is indeed real. The same criticism could however apply to the Economic and Monetary Union, which is divided in several groups with progressive degree of integration - that are the Eurozone, the Exchange Rate Mechanism area, and the countries outside of the monetary union. In fact, no such reproach is directed to the EMU, the monetary cooperation being successful. Even more, it could probably not have been established

without this multi-level organization, the homogeneity of the EMU members being a crucial matter for the cooperation. Another element of the monetary union which can be applied to the ESDP is its progressive schedule for the integration of additional members in the structure, a candidate to the EMU having to satisfy some requirement before being entitled to enter the Eurozone. Such a gradual approach could probably suits for the defence cooperation, by incorporating new participants once they presents similar characteristics with the members of the strengthened union, making thus the alliance sufficiently homogeneous and therefore viable. This progressive transition towards a strong cooperation may lean on convergence criteria, following the example of the EMU.

5.3. The ESDP as the fundamental element of member States' defence

The final step for the ESDP would consist in endowing the EU with strong defence capabilities, which not rely anymore on participants' voluntary provision but financed by a common budget, funded for example by mandatory provisions proportionate to member States' GDP. However, a strong political will is required for these objectives, since it implies a transfer of national sovereignty to the alliance, the European countries leaving the control of at least a part of their foreign policy to the EU. Nevertheless, it seems obvious that the achievement of such an alliance is unlikely at the present time, principally because the member States' will remains insufficient, but constitutes a reasonable long term objective for the European defence cooperation.

The definition of mechanisms is required in order to guide the common action towards this ambitious project. As seen above, the definition of convergence criteria could facilitate the homogenization of the participants and consequently improve the cooperation. However, the process would likely be more tricky than in the case of the monetary union. Indeed, the monetary integration was established in a favorable ground, since the cooperation between European countries dates back to 1972 and the "currency snake", followed by the European Monetary System in 1979. Therefore, the convergence criteria were introduced in a context of an already quite homogeneous area. Concerning the European defence cooperation, no previous process have been defined with the objective of coordinating the national defence orientations. Consequently, for some observers, the divergences between EU member States are currently too important to introduce convergence criteria in the ESDP.

Even if the introduction of such criteria appears to be quite premature as things stand at present, some comments can be proposed about their definition. First of all, a leveling of member States' military expenditures compared to their GDP appears to be required to harmonize the alliance. Alain Richard²¹ put forwards that the bottom level of defence expenditures should be settled at 2% of the GDP, while Robin Cook²² fixed the ratio to 2,5%. These objectives seem to be very challenging since only, respectively, five and two EU member States currently reach these levels of spending, but appear necessary in order to reduce the gap with the United States, of which defence effort represents about 4% of the GDP. Moreover, the trend in the EU is to a reduction of military budget over the past years, which makes the objective even more ambitious.

The structure of military expenditures must also be took into account in the convergence process. Indeed, huge differences are observed between member States in what the money is spent on. Thus, for example, the ratio of research and technology in the defence expenditures varies from 12% for France and United Kingdom to less than 2% for other countries. In the same manner, members' expenditures differ greatly in terms of equipment spending, or concerning military troops between countries with an exclusively professional armed forces and those with a conscription army. Consequently, the convergence might be quite tricky to achieve, and would required a particularly strong will from EU member States.

²¹ French Minister of Defence from 1997 to 2002

²² British Secretary of State for Foreign and Commonwealth Affairs from 1997 to 2001

Conclusion

At the present time and despite its difficulties, it would be excessive to affirm that the European defence cooperation is a failure. It must indeed be considered that the process required a long time to achieve, and that the dynamics over the past few years is quite promising. But the problem encountered should not been ignored however, since for some of them they jeopardize the future of the ESDP. Thus, the alliance must also dispose of the problem of the uneven burden-sharing, because it is unlikely that France can keep afloat forever. A more integrated financing process appears to be necessary, since the voluntary contributions scheme condemns the cooperation to dispose of quite provisions. The Athena mechanism is a first step towards a mandatory scheme, which could enable the alliance to avoid strategical behaviors, but nevertheless in the same time would make the decision-making process less flexible. In consequence, a strong willingness from the EU member States is required.

In addition, the cooperation must not elude the divergences between its members in order to continue its expansion. Given the current situation, making converge the EU member States on issues concerning defence appears nevertheless as very challenging matter. From the nuclear powers to the neutral countries, the EU presents a heterogeneity which is rarely observed concerning other issues. The introduction of convergence criteria is likely to reduce this divergences, but differences between member States will inevitably remain. Once again, a particular effort from the participants to the ESDP is required so as to override these divergences, but the EU countries' goodwill can be questioned, considering the few interest that some of them manifest for the defence cooperation. The ESDP is therefore at a crossroads, an have to find its place beside NATO in order to become attractive for European countries, *i.e.* it has to prove its utility, if any, to the skeptical members.

Appendix I - Detail on European Union military operations

- European Union Military Operation in the former Yugoslav Republic of Macedonia (EUFOR Concordia)
- Location: Former Yugoslav Republic of Macedonia (FYROM)
- Date: 31 March 2003 15 December 2003
- Contributing countries (troops): Austria (5), Belgium (6), Bulgaria (1), Czech Republic (2), Estonia (1), Finland (4), France (82), Germany (4), Greece (5), Hungary (2), Iceland (1), Italy (5), Latvia (2), Lithuania (1), Luxembourg (1), Netherlands (2), Norway (1), Poland (2), Portugal (2), Romania (3), Slovakia (1), Slovenia (1), Spain (4), Sweden (7), Turkey (2), UK (3)
- Total strength: 320
- Total cost: 6,99 millions \$
- Nationality of the head of mission: Portuguese
- European Union Military Operation in the Democratic Republic of Congo (Operation Artemis)
- Location: Democratic Republic of Congo
- Date: 6 June 2003 6 September 2003
- Contributing countries (troops): Austria (3), Belgium (66), Brazil (41), France (1639), Germany (7), Greece (2), Hungary (1), Ireland (5), Italy (1), Netherlands (1), South Africa (21), Spain (1), Sweden (81), UK (97)
- Total strength: 1968
- Total cost: 7,9 millions \$
- Nationality of the head of mission: French

- European Union Military Operation in Bosnia and Herzegovina (EUFOR Althea)
- Location: Bosnia and Herzegovina
- Date: 2 December 2004 still active
- Contributing countries in 2004 (troops): Albania (71), Argentina (2), Austria (265), Belgium (2), Bulgaria (197), Canada (63), Chile (23), Czech Republic (60), Estonia (2), Finland (172), France (441), Germany (1167), Greece (157), Hungary (113), Ireland (64), Italy (937), Latvia (1), Lithuania (1), Luxembourg (1), Morocco (132), Netherlands (434), New Zealand (3), Norway (3), Poland (198), Portugal (167), Romania (111), Slovakia (4), Slovenia (182), Spain (490), Sweden (68), Switzerland (10), Turkey (207), UK (862)
- Total strength: 6610 (in 2004)
- Total cost: 270,03 millions \$
- Nationality of the head of mission: British (2004), Italian (2005), German (2006), Spanish (2007 to present)
- European Union Military Operation in the Democratic Republic of Congo (EUFOR DR Congo)
- Location: Democratic Republic of the Congo
- Date: 25 April 2006 30 November 2006
- Contributing countries (troops): Austria (3), Belgium (59), Cyprus (1), Finland (11), France (975), Germany (745), Greece (1), Ireland (2), Italy (56), Luxembourg (1), Netherlands (44), Poland (125), Portugal (53), Slovenia (1), Spain (132), Sweden (50), Turkey (16)
- Total strength: 2275
- Total cost: 20,94 millions \$
- Nationality of the head of mission: German

- European Union Military Operation in Chad and the Central African Republic (EUFOR Tchad/RCA)
- Location: Chad, Central African Republic
- Date: February 2008 still active
- Contributing countries (troops): France (2000), Ireland (450), Poland (400), Sweden (202), Austria (160), Romania (120), Belgium (100), Italy (100), Spain (100), Albania (60), Finland (60), Netherlands (60), Portugal (30), Croatia (15), Slovenia (15)
- Total strength: 3872
- Total cost: 136 millions \$ (estimation for the authorized time period of 12 months)
- Nationality of the head of mission: Irish

Appendix II. Detailed data on the figure 2 concerning the share of EU member States in the ESDP operations (troops) and the EU GDP (2005)

The table below displays the share of each member State in the total provisions to the ESDP peacekeeping operations (troops) and in the total GDP of the EU in 2005 (including Bulgaria and Romania).

The ratio measures the proportion between individuals' contributions and individuals' GDP and is calculated as following:

- for the countries with a share in the total contributions higher than their share in the total GDP, the formula is: ratio = 1 (share of GDP_i / share of contributions_i)

 Thus, a ratio of 0,86 for Bulgaria means that its share in the total GDP is 86% lower than its share in the total contributions.
- for the countries with share in the total GDP higher than their share in the total contributions, the formula is: ratio = (share of contributions_i / share of GDP_i) 1

 Thus, a ratio of -0,58 for United Kingdom means that its share in the total contributions is 58% lower than its share in the total GDP.

	Share in the total contributions (%)	Share in the total GDP (%) (2005)	Ratio
Bulgaria	1,5	0,2	0,86
Slovenia	1,5	0,3	0,82
Ireland	3,8	1,5	0,61
France	37,8	16,0	0,58
Romania	1,7	0,7	0,57
Portugal	1,9	1,3	0,29
Austria	3,2	2,3	0,28
Finland	1,8	1,5	0,19
Poland	2,4	2,3	0,05
Hungary	0,9	0,8	0,03
Netherlands	4,0	4,5	-0,12
Greece	1,2	1,6	-0,25
Germany	14,1	21,1	-0,33
Spain	5,3	8,5	-0,37
Belgium	1,7	2,8	-0,38
Italy	8,1	13,1	-0,38
Sweden	1,5	2,7	-0,44
Czech Republic	0,5	0,9	-0,51
UK	7,1	16,7	-0,58
Estonia	0,02	0,1	-0,78
Latvia	0,02	0,1	-0,82
Slovakia	0,04	0,3	-0,89
Luxembourg	0,02	0,3	-0,91
Lithuania	0,01	0,2	-0,92
Cyprus	0,01	0,1	-0,94
Malta	0	0,04	-1

Appendix III - Detailed data on the correspondence analysis concerning EU member States' participation to UN, NATO and EU operations from 2003 to 2008

Notes:

- Denmark is not integrated into this analysis because of its non-participation to the ESDP
- Malta does not appear in the following data because having not contribute to neither UN, NATO or EU peacekeeping missions during the period
- Some countries with low contributions are usually not kept in such an analysis because being 'sparse' modality which often lead to anomalies. Are concerning here, for example, Luxembourg or, particularly, Cyprus. They have been nevertheless integrated into the analysis for informative purpose.

	UN	NATO	EU
United kingdom	1677	13816	962
France	2966	7901	5137
Germany	980	15059	1923
Italy	2642	10544	1099
Spain	1531	3412	727
Netherlands	424	4070	541
Greece	261	1294	165
Poland	3255	1641	325
Sweden	579	943	206
Belgium	334	1715	233
Portugal	172	628	252
Finland	422	626	247
Austria	2296	571	436
Czech Republic	1	967	62
Romania	8	1541	234
Hungary	580	984	116
Ireland	1848	303	521
Slovakia	2017	276	5
Bulgaria	6	627	198
Slovenia	0	311	199
Latvia	0	168	3
Lithuania	0	369	2
Luxembourg	2	61	3
Estonia	0	250	3
Cyprus	2	0	1

Contingency table - EU member States' contributions (troops) to UN, NATO and EU peacekeeping operations from 2003 to 2008 (source: SIPRI, UN)

	F1	F2
UN	74,39	4,39
NATO	25,51	8,83
EU	0,11	86,77

Columns plots contribution (%) to the axes

The table above brings an interpretation of the axes F1 and F2. Thus, the countries' participation to UN and NATO operations is readable on the axis F1, whereas the axis F2 informs about the involvements into the EU framework.

	F1	F2
United kingdom	6,48	8,87
France	0,28	65,11
Germany	11,14	0,76
Italy	0,60	4,56
Spain	0,42	0,01
Netherlands	2,09	0,22
Greece	0,20	0,22
Poland	18,32	3,86
Sweden	0,56	0,05
Belgium	0,29	0,19
Portugal	0,01	1,42
Finland	0,51	0,46
Austria	17,65	0,07
Czech Republic	1,26	0,48
Romania	1,76	0,01
Hungary	0,51	0,82
Ireland	15,15	0,73
Slovakia	20,79	5,71
Bulgaria	0,58	1,19
Slovenia	0,22	4,02
Latvia	0,23	0,22
Lithuania	0,52	0,59
Luxembourg	0,06	0,05
Estonia	0,35	0,36
Cyprus	0,02	0,01

Raws plots contribution (%) to the axes

List of acronyms

CFSP: Common Foreign and Security Policy

EDA: European Defence Agency

EDC: European Defence Community

EEC: European Economic Community

EMU: Economic and Monetary Union

ESDP: European Security and Defence Policy

EU: European Union

Euromarfor: European Maritime Force

Eurofor: European Operational Rapid Force

GDP: Gross Domestic Product

GPG: Global Public Good

HHG: Helsinki Headline Goal

NATO: North Atlantic Treaty Organization

NPG: National Public Good

RPG: Regional Public Good

SIPRI: Stockholm International Peace Research Institute

TPG: Transnational Public Good

UN: United Nations

WEU: Western European Union

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